FIG. 1

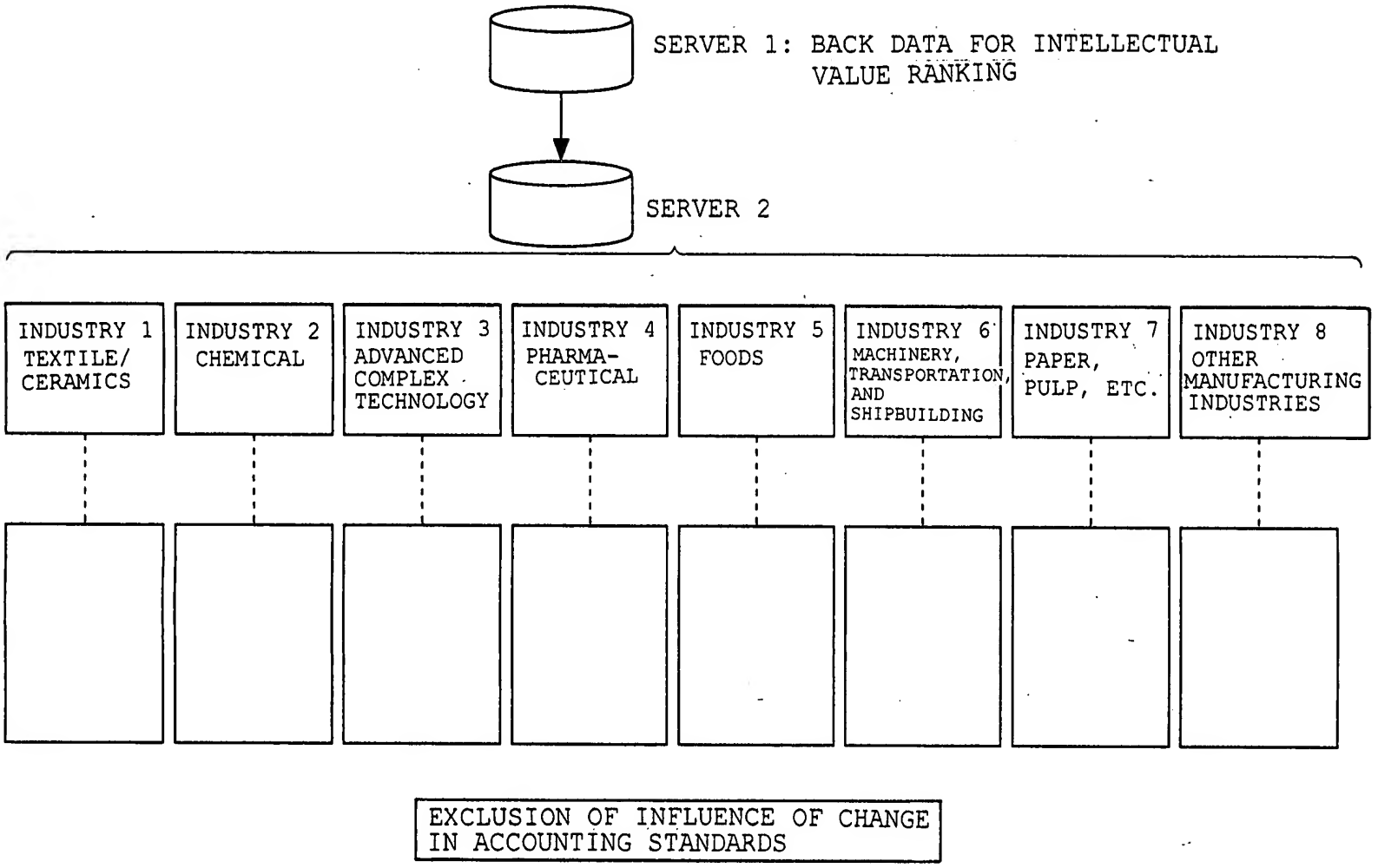

FIG. 2

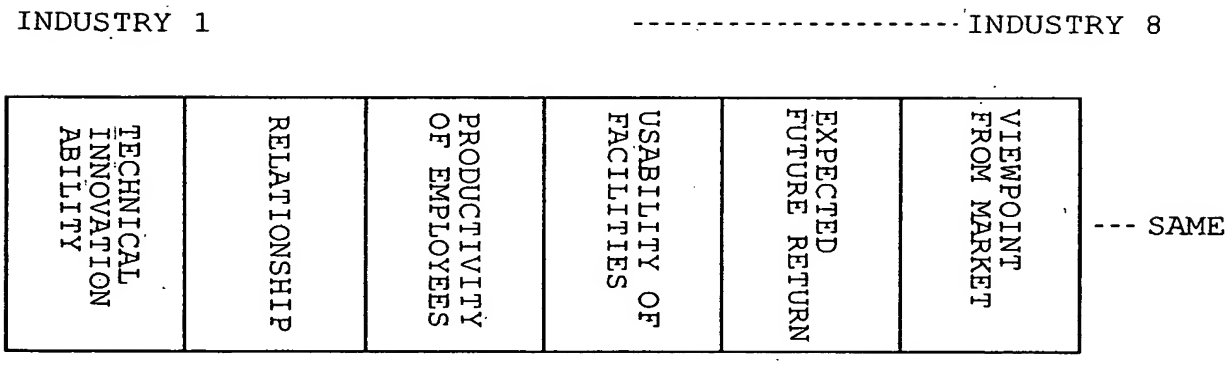
INDUSTRY 1
INDUSTRY 8
VIEWPOINT FROM MARKET
EXPECTED FUTURE RETURN
USABILITY OF FACILITIES
PRODUCTIVITY OF EMPLOYEES
RELATIONSHIP
TECHNICAL INNOVATION ABILITY
--- SAME

FIG. 3

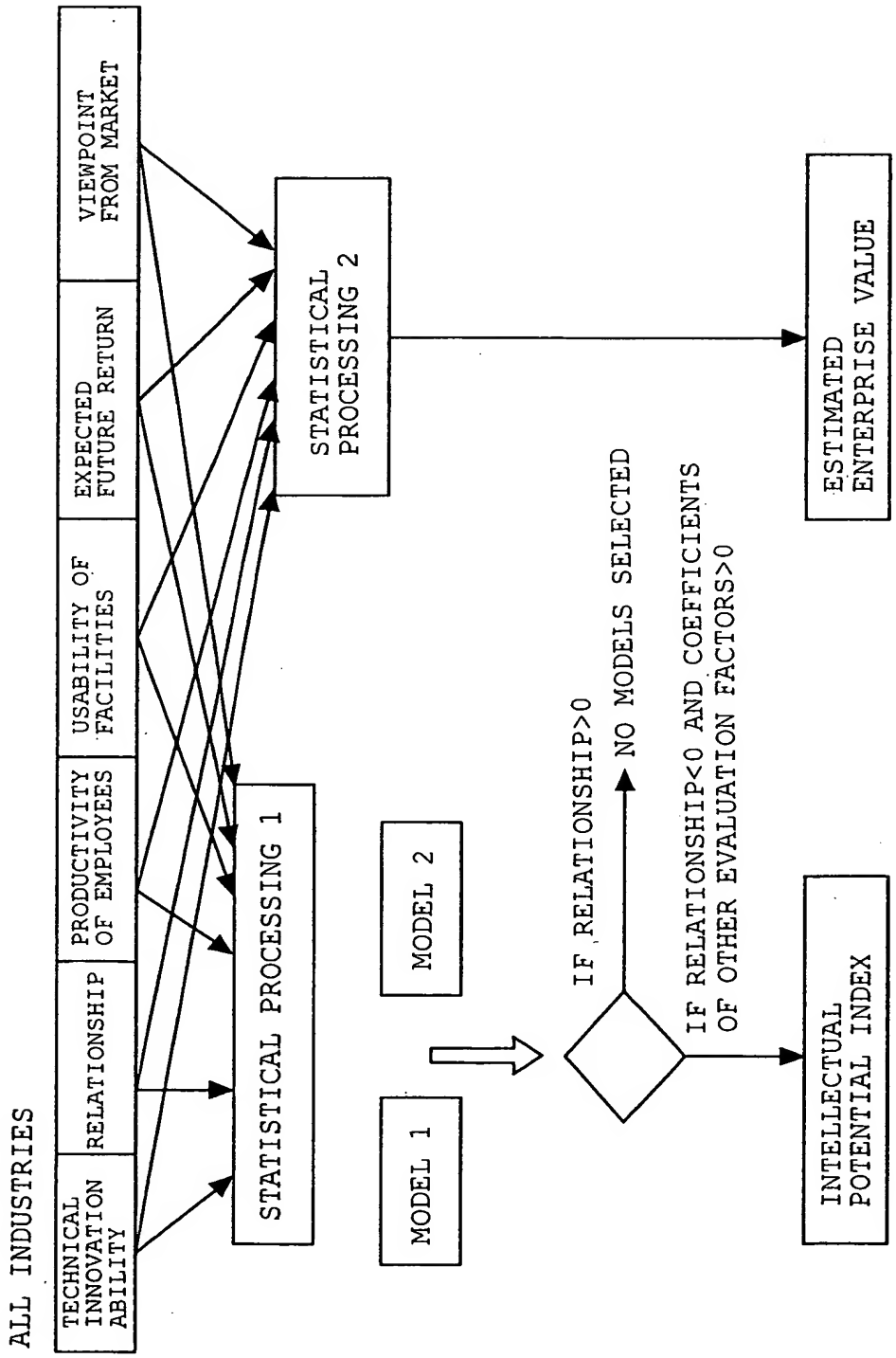
ALL INDUSTRIES
TECHNICAL INNOVATION ABILITY
RELATIONSHIP
PRODUCTIVITY OF EMPLOYEES
USABILITY OF FACILITIES
EXPECTED FUTURE RETURN
VIEWPOINT FROM MARKET
STATISTICAL PROCESSING 1
STATISTICAL PROCESSING 2
MODEL 1
MODEL 2
IF RELATIONSHIP>0
NO MODELS SELECTED
IF RELATIONSHIP<0 AND COEFFICIENTS OF OTHER EVALUATION FACTORS>0
ESTIMATED ENTERPRISE VALUE
INTELLECTUAL POTENTIAL INDEX

FIG. 4

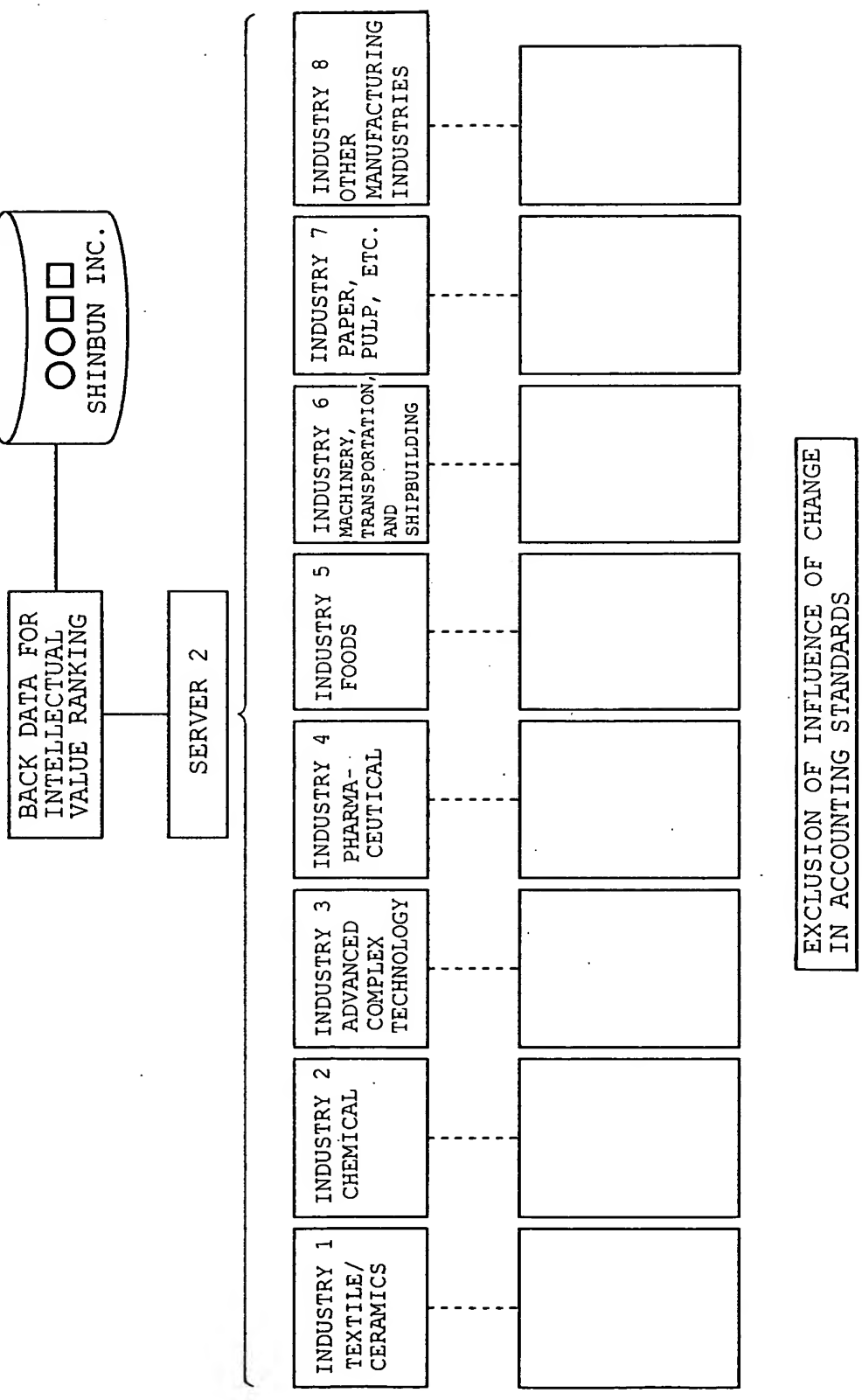
OO□□
SHINBUN INC.
BACK DATA FOR INTELLECTUAL VALUE RANKING
SERVER 2
INDUSTRY 1 TEXTILE/ CERAMICS
INDUSTRY 2 CHEMICAL
INDUSTRY 3 ADVANCED COMPLEX TECHNOLOGY
INDUSTRY 4 PHARMA-CEUTICAL
INDUSTRY 5 FOODS
INDUSTRY 6 MACHINERY, TRANSPORTATION, AND SHIPBUILDING
INDUSTRY 7 PAPER, PULP, ETC.
INDUSTRY 8 OTHER MANUFACTURING INDUSTRIES
EXCLUSION OF INFLUENCE OF CHANGE IN ACCOUNTING STANDARDS

FIG. 5

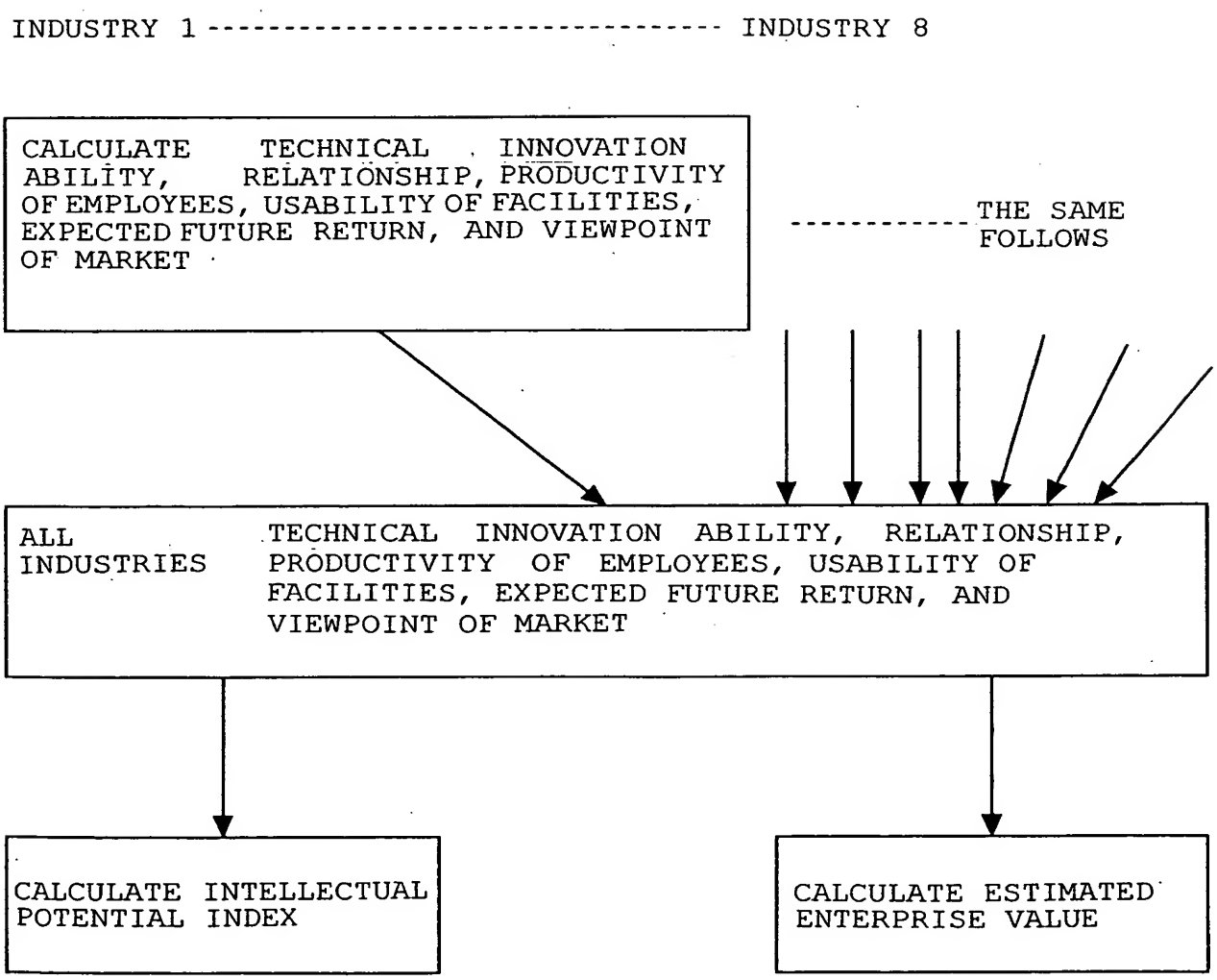
INDUSTRY 1
INDUSTRY 8
CALCULATE TECHNICAL INNOVATION ABILITY, RELATIONSHIP, PRODUCTIVITY OF EMPLOYEES, USABILITY OF FACILITIES, EXPECTED FUTURE RETURN, AND VIEWPOINT OF MARKET
THE SAME FOLLOWS
ALL INDUSTRIES
TECHNICAL INNOVATION ABILITY, RELATIONSHIP, PRODUCTIVITY OF EMPLOYEES, USABILITY OF FACILITIES, EXPECTED FUTURE RETURN, AND VIEWPOINT OF MARKET
CALCULATE INTELLECTUAL POTENTIAL INDEX
CALCULATE ESTIMATED ENTERPRISE VALUE

FIG. 6

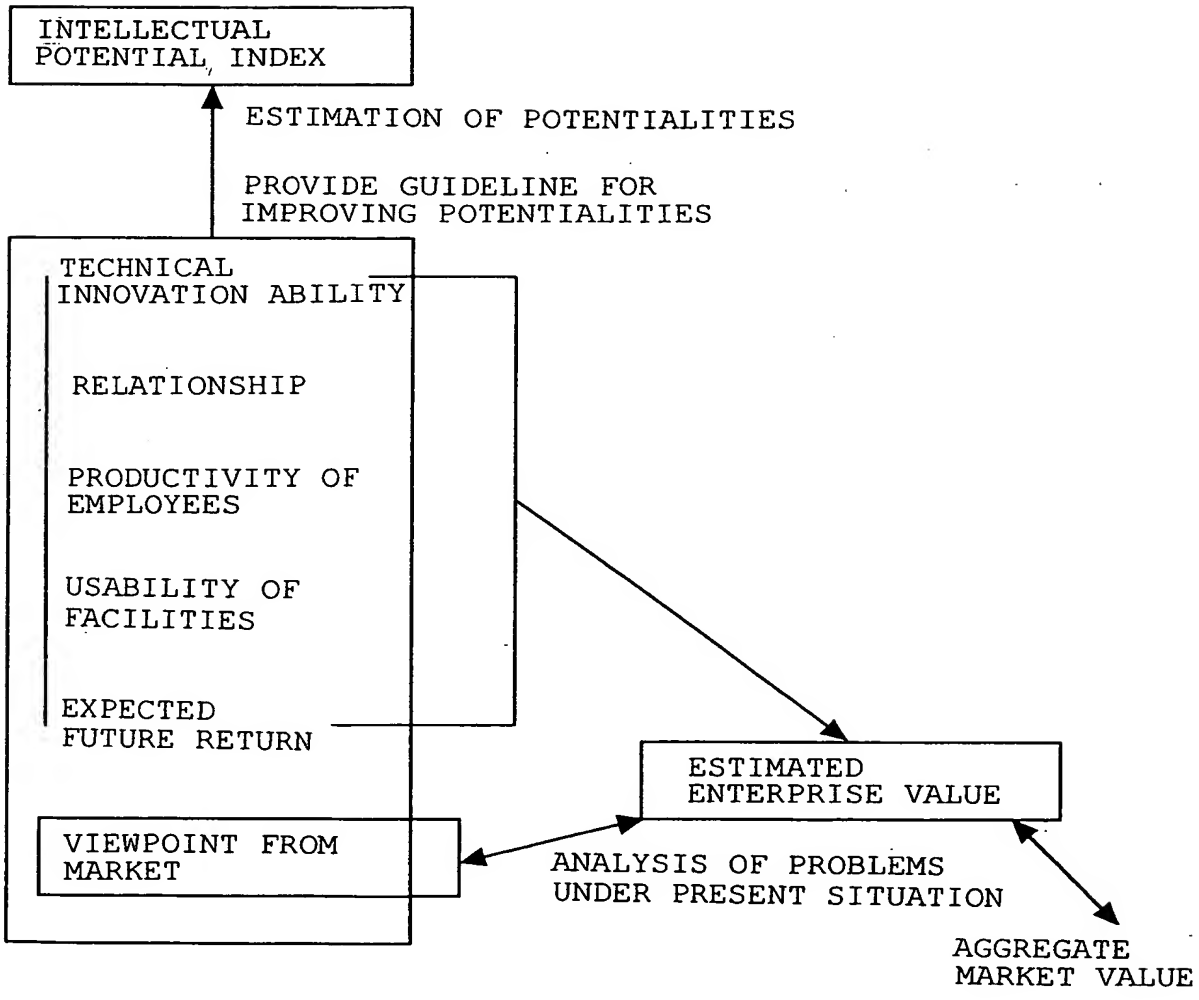
INTELLECTUAL POTENTIAL INDEX
ESTIMATION OF POTENTIALITIES
PROVIDE GUIDELINE FOR IMPROVING POTENTIALITIES
TECHNICAL INNOVATION ABILITY
RELATIONSHIP
PRODUCTIVITY OF EMPLOYEES
USABILITY OF FACILITIES
EXPECTED FUTURE RETURN
ESTIMATED ENTERPRISE VALUE
VIEWPOINT FROM MARKET
ANALYSIS OF PROBLEMS UNDER PRESENT SITUATION
AGGREGATE MARKET VALUE

FIG. 7

◇ BACK DATA FOR INTELLECTUAL VALUE RANKING (PROVISIONAL NAME).
ND AND - MEAN THAT THERE IS NO DATA OR DATA CANNOT BE CALCULATED.
USE ONLY CONSOLIDATED DATA OF MANUFACTURING INDUSTRY IN NIKKEI 300.
USE FISCAL YEAR CONVERSION FOR CHANGE OF SETTLEMENT TERM.
NUMBER OF EMPLOYEES AND TANGIBLE FIXED ASSETS IN OPERATING PROFIT/NUMBER OF EMPLOYEES AND OPERATING PROFIT/TANGIBLE FIXED ASSETS ARE AVERAGES AT BEGINNING AND END OF PERIOD.
INVENTORY ASSETS OF INVENTORY ASSET TURNOVER PERIOD ARE ALSO AVERAGE AT BEGINNING AND END OF PERIOD. IN PRINCIPLE, RESEARCH AND DEVELOPMENT EXPENSES ARE BASED ON DESCRIPTION IN FINANCIAL REPORT.

		YEAR/MONTH OF SETTLEMENT OF ACCOUNT	CONSOLIDATION STANDARD FLAG	NIKKEI INDUSTRIAL CLASSIFICATION	OPERATING PROFIT	RESEARCH AND DEVELOPMENT EXPENSES
CLASSIFICATION NUMBER	ENTERPRISE NAME	NEAREST YEAR/MONTH	NEAREST		NEAREST MILLION YEN	NEAREST MILLION YEN
T2002	N GROUP HEAD OFFICE	2-Mar	JAPANESE STANDARD	FOODS	15593	5036
T2202	M CONFECTIONERY	2-Mar	JAPANESE STANDARD	FOODS	13043	18838
⋮	⋮	⋮	⋮	⋮	⋮	⋮
T7994	0 FACTORY	2-Mar	JAPANESE STANDARD	OTHER MANUFACTURING INDUSTRIES	3870	690

RESEARCH AND DEVELOPMENT EXPENSES	RESEARCH AND DEVELOPMENT EXPENSES	ACCUMULATION OF RESEARCH AND DEVELOPMENT EXPENSES IN THREE YEARS	INVENTORY ASSET TURNOVER PERIOD	TOTAL INVENTORY ASSETS	TOTAL INVENTORY ASSETS
ONE PERIOD EARLIER MILLION YEN	TWO PERIODS EARLIER MILLION YEN	MILLION YEN	DAYS	NEAREST MILLION YEN	ONE PERIOD EARLIER MILLION YEN
5071	5006	15163	30.86	35510	31648
17667	15854	52359	46.00	46775	44432
⋮	⋮	⋮	⋮	⋮	⋮
655	552	1897	31.46	11593	15690

		SALES/OPERATING PROFIT	OPERATING PROFIT/NUMBER OF EMPLOYEES	NUMBER OF EMPLOYEES	NUMBER OF EMPLOYEES	OPERATING PROFIT/TANGIBLE FIXED ASSETS
CLASSIFICATION NUMBER	ENTERPRISE NAME	NEAREST MILLION YEN	NEAREST MILLION YEN	NEAREST	ONE PERIOD EARLIER	TIMES
T2002	N GROUP HEAD OFFICE	397173	3.305352411	4684	4751	0.161238787
T2202	M CONFECTIONERY	361867	1.781952319	7287	7352	0.091636895
⋮	⋮	⋮	⋮	⋮	⋮	⋮
T7994	0 FACTORY	158245	1.106662854	3492	3502	0.075567488

TOTAL TANGIBLE FIXED ASSETS	TOTAL TANGIBLE FIXED ASSETS	TOTAL CAPITAL	TOTAL CAPITAL	AGGREGATE MARKET VALUE
NEAREST MILLION YEN	ONE PERIOD EARLIER MILLION YEN	NEAREST MILLION YEN	ONE PERIOD EARLIER MILLION YEN	MONTH END VALUE IN SETTLEMENT TERM HUNDRED MILLION YEN
99450	93965	215355	186138	1806.2777
143528	141139	155990	158408	1777.3163
⋮	⋮	⋮	⋮	⋮
50017	52408	52386	53136	608.0353

FIG. 8

INDUSTRY 1 TEXTILE/CERAMICS DATA OF EVALUATION FACTORS

CLASSIFICATION NUMBER	NAME OF ENTERPRISE	TECHNICAL INNOVATION ABILITY	RELATIONSHIP	PRODUCTIVITY OF EMPLOYEES	USABILITY OF FACILITIES	EXPECTED FUTURE RETURN	VIEWPOINT FROM MARKET
T000X	X COMPANY	19970	82.02	1.43	0.08	14922.08	125762
T000Y	Y COMPANY	14859	67.74	0.48	0.04	-75.8	106124
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

NOTE

TECHNICAL INNOVATION ABILITY: ACCUMULATED RESEARCH AND DEVELOPMENT EXPENSES IN PREVIOUS YEAR

RELATIONSHIP: INVENTORY ASSET TURNOVER PERIOD

PRODUCTIVITY OF EMPLOYEES: OPERATING PROFIT PER EMPLOYEE

USABILITY OF FACILITIES: RATE OF RETURN ON TANGIBLE FIXED ASSETS

EXPECTED FUTURE RETURN: RESIDUAL PROFIT

VIEWPOINT FROM MARKET: AGGREGATE MARKET VALUE AT END OF SETTLEMENT TERM

CALCULATION EXAMPLE: X COMPANY

ACCUMULATED RESEARCH AND DEVELOPMENT EXPENSES IN PREVIOUS YEARS $=9243+10727=19970$

INVENTORY ASSET TURNOVER PERIOD $=\dfrac{\text{INVENTORY ASSETS } 365/\text{INVENTORY ASSET TURNOVER RATIO}}{\text{INVENTORY ASSET TURNOVER RATIO}}$

$=383078/\{(82767+89397)/2\}=4.45$

$365/4.45=82.019$

OPERATING PROFIT PER EMPLOYEE $=16332/\{(10946+11949)/2\}=1.43$

RATE OF RETURN ON TANGIBLE FIXED ASSET $=16332/\{(244862+154198)/2\}=0.082$

RESIDUAL PROFIT $=16332\times(1-0.4)-(96603\times0.04)+8987=14922.08$

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FIG. 9

INDUSTRY 1 TEXTILE/CERAMICS

CLASSIFICATION NUMBER	ENTERPRISE NAME	TECHNICAL INNOVATION ABILITY	RELATIONSHIP	PRODUCTIVITY OF EMPLOYEES	USABILITY OF FACILITIES	EXPECTED FUTURE RETURN	VIEWPOINT FROM MARKET
T000X	X COMPANY	19970	82.02	1.43	0.08	14922.08	125762
T000Y	Y COMPANY	14859	67.74	0.48	0.04	-75.8	106124.2

(THE SAME FOLLOWS)

DOWNLOAD EXCEL FILE INTO SPSS FILE FOR EACH INDUSTRY AND STANDARDIZE EXCEL FILE FOR EACH STATISTICAL INDUSTRY DESCRIBED IN SPSS

NOTE: USE OPERATING PROFIT NUMERICAL VALUES AFTER ADJUSTMENT OF INFLUENCE DUE TO CHANGE IN ACCOUNTING POLICIES FOR PRODUCTIVITY OF EMPLOYEES AND USABILITY OF FACILITIES

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATIONSHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET
T000X	X COMPANY	-0.50	0.83	0.10	0.14	-0.24	-0.82
T000Y	Y COMPANY	-0.73	0.06	-1.17	-1.00	-1.39	-0.90

(THE SAME FOLLOWS)

COMBINE STANDARDIZED DATA FILE FOR EACH INDUSTRY TO CREATE FILE OF STANDARDIZED DATA OF ALL INDUSTRIES

NOTE: Z INDICATES STANDARDIZED DATA

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATIONSHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET
T000X	X COMPANY	-0.50	0.83	0.10	0.14	-0.24	-0.82
T000Y	Y COMPANY	-0.73	0.06	-1.17	-1.00	-1.39	-0.90
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
T000n	N COMPANY	1.17	.34	-.25	-.10	.46	.16
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
T000nz	Z COMPANY	-0.88	0.15	-0.43	-0.51	-0.83	-0.69

VIEWPOINT FROM MARKET IS SET ON Y AXIS AND OTHER STANDARDIZED EVALUATION FACTORS ARE SEQUENTIALLY SET ON X AXIS TO DRAW SCATTER DIAGRAM OF STANDARDIZED DATA IN SPSS. SUBSEQUENTLY, Z EXPECTED FUTURE RETURN IS SET ON Y AXIS TO REPEAT SAME OPERATION. CONFIRM THAT THERE IS POSITIVE CORRELATION BETWEEN EVALUATION FACTORS SET ON Y AXIS AND EVALUATION FACTORS SET ON X AXIS. MOREOVER, CONFIRM POSITIVE CORRELATION BETWEEN Z VIEWPOINT FROM MARKET AND RESPECTIVE EVALUATION FACTORS IN SIMPLE LINEAR REGRESSION WITH "Z VIEWPOINT FROM MARKET" SET AS EXPLAINED VARIABLE

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATIONSHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET
T000X	X COMPANY	-0.50	0.83	0.10	0.14	-0.24	-0.82
T000Y	Y COMPANY	-0.73	0.06	-1.17	-1.00	-1.39	-0.90
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
T000nz	Z COMPANY	-0.88	0.15	-0.43	-0.51	-0.83	-0.69

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FIG. 10

SELECT ALL OF SIX STANDARDIZED EVALUATION FACTORS AS VARIABLES IN SPSS. "BREAKDOWN OF DATA" CHANGES TO "FACTOR ANALYSIS" ACCORDING TO SPSS. SELECT "PRINCIPAL COMPONENT ANALYSIS/VARIANCE COVARIANCE MATRIX" IN "FACTOR SAMPLING". SELECT "SAVE AS VARIABLES" IN "SCORE (VARIANCE SCORE)". EXECUTION.

(PRINCIPAL COMPONENT SCORE COEFFICIENT MATRIX)

	COMPONENT	
	1	2
Z TECHNICAL INNOVATION ABILITY	0.303	-0.285
Z RELATIONSHIP	-0.029	-0.378
Z PRODUCTIVITY OF EMPLOYEES	0.165	0.493
Z USABILITY OF FACILITIES	0.129	0.365
Z EXPECTED FUTURE RETURN	0.343	-0.103
Z VIEWPOINT FROM MARKET	0.323	-0.091

TABLE ON THE LEFT IS DISPLAYED ON OUTPUT REPORT.

CHANGE IN DATA FILE: FAC_1 AND FAC_2 ARE ADDED. FAC_1 AND FAC_2 CORRESPOND TO INDEXES CALCULATED ACCORDING TO TWO MODELS, RESPECTIVELY.

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATION SHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET	FAC1_2	FAC2_2
T000X	X COMPANY	-0.50	0.83	0.10	0.14	-0.24	-0.82	-0.50	0.04
T000Y	Y COMPANY	-0.73	0.06	-1.17	-1.00	-1.39	-0.90	-1.36	-0.59
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
T000nz	Z COMPANY	-0.88	0.15	-0.43	-0.51	-0.83	-0.69	-0.94	-0.08

MODEL 1: INDEX (FAC_1) = 0.303 × Z TECHNICAL INNOVATION ABILITY − 0.029 × Z RELATIONSHIP + 0.165 × Z PRODUCTIVITY OF EMPLOYEES + 0.129 × USABILITY OF FACILITIES + 0.343 × Z EXPECTED FUTURE RETURN + 0.323 × Z VIEWPOINT FROM MARKET

MODEL 2: INDEX (FAC_2) = 0.285 × Z TECHNICAL INNOVATION ABILITY − 0.378 × Z RELATIONSHIP + 0.493 × Z PRODUCTIVITY OF EMPLOYEES + 0.365 × USABILITY OF FACILITIES − 0.103 × EXPECTED FUTURE RETURN − 0.091 × Z VIEWPOINT FROM MARKET

SELECTION OF MODEL

AMONG MODELS DESCRIBED ABOVE, ONLY MODEL 1 IS MODEL, FOR WHICH COEFFICIENT OF ONLY "Z RELATIONSHIP" HAS A MINUS ATTACHED. THIS MEANS THAT SIGNS OF COEFFICIENTS ARE ATTACHED TO ALL EVALUATION FACTORS IN DESIRABLE DIRECTION. THEREFORE, MODEL 1 IS ADOPTED.

IN SPSS, REARRANGE DATA IN DESCENDING ORDER WITH FAC1_2 AS REFERENCE.

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATIONSHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET	FAC1_2	FAC2_2
T000F	F COMPANY	4.74	1.62	-0.11	-0.10	4.45	3.60	4.14	-2.91
T000G	G COMPANY	1.81	-1.37	1.10	0.03	3.56	4.25	3.45	-0.20

FIG. 11

THE REST IS OMITTED.

CHANGE FAC1_2 TO DEVIATION.

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATIONSHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET	FAC1_2	FAC2_2	DEVIATION
T000F	F COMPANY	4.74	1.62	-0.11	-0.10	4.45	3.60	4.14	-2.91	91.38
T000G	G COMPANY	1.81	-1.37	1.10	0.03	3.56	4.25	3.45	-0.20	84.48

THE REST IS OMITTED.

SET INDEX OF ENTERPRISE WITH HIGHEST SCORE TO BE 100 TO MOVE DISTRIBUTION. (ADD 8.62 (100-91.38) TO ALL DEVIATIONS.)

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATION SHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET	FAC1_2	FAC2_2	DEVIATION	INTELLECTUAL POTENTIAL INDEX
T000F	F COMPANY	4.74	1.62	-0.11	-0.10	4.45	3.60	4.14	-2.91	91.38	100.00
T000G	G COMPANY	1.81	-1.37	1.10	0.03	3.56	4.25	3.45	-0.20	84.48	93.10

THE REST IS OMITTED.

FIG. 12

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATIONSHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET
T000X	X COMPANY	-0.502006918	0.825852516	0.101609965	0.141309586	-0.239440376	-0.817647372
T000Y	Y COMPANY	-0.729981361	0.064580654	-1.173920915	-0.996340473	-1.385563532	-0.903403065
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
T000nz	Z COMPANY	-0.877620296	0.148839296	-0.432475001	-0.514909266	-0.825216879	-0.690704056

USE STANDARDIZED DATA SAME AS THAT USED FOR CALCULATION OF INTELLECTUAL POTENTIAL INDEX.

⇩

IN MULTIPLE REGRESSION ANALYSIS, FOR EXCLUSION OF MULTIPLE COLLINEARITY, INTEGRATE FIVE VARIABLES FROM Z TECHNICAL INNOVATION ABILITY TO Z EXPECTED FUTURE RETURN. USE PRINCIPLE COMPONENT ACCORDING TO VARIANCE-COVARIANCE MATRIX. USE SPSS.

(PRINCIPAL COMPONENT SCORE COEFFICIENT MATRIX)

	COMPONENT	
	1	2
Z TECHNICAL INNOVATION ABILITY	0.367	0.401
Z RELATIONSHIP	-0.083	0.379
Z PRODUCTIVITY OF EMPLOYEES	0.287	-0.437
Z USABILITY OF FACILITIES	0.232	-0.313
Z EXPECTED FUTURE RETURN	0.439	0.228

OUTPUT REPORT

⇩

ADOPT COMPONENT 1, FOR WHICH ONLY COEFFICIENT OF "Z RELATIONSHIP" IS MINUS.

INTEGRATED FIVE VARIABLES (PROFIT CREATING ABILITY) = 0.367 × Z TECHNICAL INNOVATION ABILITY − 0.083 × Z RELATIONSHIP + 0.287 × Z PRODUCTIVITY OF EMPLOYEES + 0.232 × Z USABILITY OF FACILITIES + 0.439 × Z EXPECTED FUTURE RETURN

⇩

ADD INTEGRATED FIVE VARIABLES (PROFIT CREATING ABILITY) TO FILE.

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FIG. 13

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATIONSHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET	INTEGRATED FIVE VARIABLES
T000X	X COMPANY	-0.50	0.83	0.10	0.14	-0.24	-0.82	-0.30
T000Y	Y COMPANY	-0.73	0.06	-1.17	-1.00	-1.39	-0.90	-1.51
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
T000nz	Z COMPANY	-0.88	0.15	-0.43	-0.51	-0.83	-0.69	-0.98

PERFORM MULTIPLE REGRESSION ANALYSIS BY BACKWARD ELIMINATION METHOD WITH INTEGRATED FIVE VARIABLES, NAMELY, Z TECHNICAL INNOVATION ABILITY, Z RELATIONSHIP, Z PRODUCTIVITY OF EMPLOYEES, Z USABILITY OF FACILITIES, Z EXPECTED FUTURE RETURN, AND Z VIEWPOINT FROM MARKET, SET AS EXPLANATORY VARIABLES AND Z VIEWPOINT FROM MARKET SET AS EXPLAINED VARIABLE.

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATION SHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET	INTEGRATED FIVE VARIABLES	ZPR_1	ZRE_1
T000X	X COMPANY	-0.50	0.83	0.10	0.14	-0.24	-0.82	-0.30	-0.42	-0.82
T000Y	Y COMPANY	-0.73	0.06	-1.17	-1.00	-1.39	-0.90	-1.51	-1.33	0.22
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
T000nz	Z COMPANY	-0.88	0.15	-0.43	-0.51	-0.83	-0.69	-0.98	-0.92	0.04

NOTE: ZPR IS ESTIMATED VALUE OBTAINED AS A RESULT OF PERFORMING MULTIPLE REGRESSION ANALYSIS AND ZRE IS RESIDUAL.

(COEFFICIENT)		NON-STANDARDIZED COEFFICIENT		STANDARDIZED COEFFICIENT		
MODEL		B	STANDARD ERROR	BETA	t	SIGNIFICANT PROBABILITY
1	(CONSTANT)	1.03E-16	0.048		0	1
	Z TECHNICAL INNOVATION ABILITY	-0.249	0.198	-0.249	-1.257	0.211
	Z RELATIONSHIP	0.104	0.057	0.104	0.104	0.071
	Z PRODUCTIVITY OF EMPLOYEES	-0.216	0.118	-0.216	-0.216	0.069
	Z USABILITY OF FACILITIES	-0.399	0.107	-0.359	-0.359	0
	INTEGRATED FIVE VARIABLES	1.269	0.253	1.299	5014	0
2	(CONSTANT)	7.42E-17	0.048		0	1
	Z RELATIONSHIP	7.01E-02	0.051	0.07	1.387	0.167
	Z PRODUCTIVITY OF EMPLOYEES	-9.63E-02	0.07	-0.096	-1.38	0.017
	Z USABILITY OF FACILITIES	-3.06E-01	0.078	-0.275	-3.946	0
	INTEGRATED FIVE VARIABLES	9.61E-01	0.063	0.984	15.167	0
3	(CONSTANT)	7.70E-17	0.048		0	1
	Z RELATIONSHIP	7.73E-02	0.05	0.077	1.533	0.127
	Z USABILITY OF FACILITIES	-3.56E-01	0.069	-0.32	-5.174	0
	INTEGRATED FIVE VARIABLES	9.32E-01	0.06	0.954	15.524	0
4	(CONSTANT)	7.46E-17	0.048		0	1
	Z RELATIONSHIP	-3.69E-01	0.069	-0.331	-5.377	0
	INTEGRATED FIVE VARIABLES	9.26E-01	0.06	0.948	15.386	0

MODEL 4 IS ADOPTED AUTOMATICALLY ACCORDING TO OUTPUT REPORT.

BREAKDOWN MODEL FORMULA WITH INTEGRATED FIVE VARIABLES INCLUDED THEREIN. EXAMINE WEIGHTING OF EVALUATION FACTORS.

MODEL FORMULA

STANDARDIZED DATA ESTIMATED ENTERPRISE VALUE = -0.369 × Z USABILITY OF FACILITIES + 0.926 × INTEGRATED FIVE VARIABLES

= -0.369 × Z USABILITY OF FACILITIES + 0.926 (0.367 × TECHNICAL INNOVATION ABILITY - 0.083 × Z RELATIONSHIP + 0.287 × Z PRODUCTIVITY OF EMPLOYEES + 0.232 × USABILITY OF FACILITIES + 0.439 × EXPECTED FUTURE RETURN)

= 0.34 × TECHNICAL INNOVATION ABILITY - 0.077 × RELATIONSHIP + 0.266 × PRODUCTIVITY OF EMPLOYEES - 0.154 × USABILITY OF FACILITIES + 0.407 × EXPECTED FUTURE RETURN + 7.46E - 17

WHEN NON-STANDARDIZED DATA BECOMES MINUS, FIXED NUMBER IS ADDED TO CONSTANT ITEM TO ADJUST NON-STANDARD DATA. ADD 0.5 TO 2001 DATA.

STANDARDIZED DATA ESTIMATED ENTERPRISE VALUE = 0.34 × TECHNICAL INNOVATION ABILITY - 0.077 × RELATIONSHIP + 0.266 × PRODUCTIVITY OF EMPLOYEES - 0.154 × USABILITY OF FACILITIES + 0.407 × EXPECTED FUTURE RETURN + 7.46E - 17 + 0.5

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATIONSHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET	INTEGRATED FIVE VARIABLES	ZPR_1	ZRE_1	ADJUSTED STANDARDIZED ESTIMATED ENTERPRISE VALUE
T000X	X COMPANY	-0.50	0.83	0.10	0.14	-0.24	-0.82	-0.30	-0.42	-0.82	0.17
T000Y	Y COMPANY	-0.73	0.06	-1.17	-1.00	-1.39	-0.90	-1.51	-1.33	0.22	-0.48
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
T000nz	Z COMPANY	-0.88	0.15	-0.43	-0.51	-0.83	-0.69	-0.98	-0.92	0.04	-0.18

CALCULATE AVERAGE AND DISPERSION OF "VIEWPOINT FROM MARKET" FOR EACH INDUSTRY. MULTIPLY ADJUSTED STANDARDIZED ESTIMATED ENTERPRISE VALUE BY DISPERSION AND ADD AVERAGE TO OBTAIN NON-STANDARDIZED DATA. SET THE NUMERICAL VALUE AS ESTIMATED ENTERPRISE VALUE.

CLASSIFICATION NUMBER	ENTERPRISE NAME	Z TECHNICAL INNOVATION ABILITY	Z RELATIONSHIP	Z PRODUCTIVITY OF EMPLOYEES	Z USABILITY OF FACILITIES	Z EXPECTED FUTURE RETURN	Z VIEWPOINT FROM MARKET	INTEGRATED FIVE VARIABLES	ZPR_1	ZRE_1	ADJUSTED STANDARDIZED ESTIMATED ENTERPRISE VALUE	ESTIMATED ENTERPRISE VALUE
T000X	X COMPANY	-0.50	0.83	0.10	0.14	-0.24	-0.82	-0.30	-0.42	-0.82	0.17	352741
T000Y	Y COMPANY	-0.73	0.06	-1.17	-1.00	-1.39	-0.90	-1.51	-1.33	0.22	-0.48	204017
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
T000nz	Z COMPANY	-0.88	0.15	-0.43	-0.51	-0.83	-0.69	-0.98	-0.92	0.04	-0.18	249558

AVERAGE VALUE OF "VIEWPOINT FROM MARKET" (AGGREGATE MARKET VALUE) OF TEXTILE/CERAMICS: 313001, DISPERSION: 228997 ESTIMATED ENTERPRISE VALUE OF X COMPANY

AVERAGE VALUE OF "VIEWPOINT FROM MARKET" (AGGREGATE MARKET VALUE) OF OTHER MANUFACTURING INDUSTRIES: 316816, DISPERSION: 370654 ESTIMATED ENTERPRISE VALUE OF Z COMPANY

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FIG. 14

10/551560

FIG. 15

VARIABLE STANDARDIZATION FOR RESPECTIVE INDUSTRIES

PHARMACEUTICAL

T COMPANY		STANDARDIZATION
TECHNICAL INNOVATION ABILITY	167,106	$\frac{(167,106-98,441)}{37,201}=1.85$
RELATIONSHIP	35.68	$\frac{(35.68-42.56)}{11.32}=-0.61$
PRODUCTIVITY OF EMPLOYEES	18.50	$\frac{(18.50-8.97)}{4.78}=1.99$
USABILITY OF FACILITIES	1.30	$\frac{(1.30-0.56)}{0.31}=2.36$
EXPECTED FUTURE RETURN	212221	$\frac{(212221-85965)}{52716}=2.40$
VIEWPOINT FROM MARKET	4642000	$\frac{(4642000-1217228)}{1303391}=2.63$

FIG. 16

INTELLECTUAL POTENTIAL INDEX

T COMPANY

		CHANGED TO DEVIATION	
STANDARDIZED INDEX	2.98	⟹	79.84

· STANDARDIZED INDEX = 0.303 × Z TECHNICAL INNOVATION ABILITY - 0.029 × Z RELATIONSHIP + 0.165 × Z PRODUCTIVITY OF EMPLOYEES + 0.129 × Z USABILITY OF FACILITIES + 0.343 × Z EXPECTED FUTURE RETURN + 0.323 × Z VIEWPOINT FROM MARKET

· Z: STANDARDIZED DATA

INTELLECTUAL POTENTIAL INDEX

79.84 + (100 - DEVIATION OF TOP ENTERPRISE) = 88.46

FIG. 17

ESTIMATED ENTERPRISE VALUE

PHARMACEUTICAL

T COMPANY

ESTIMATED ENTERPRISE VALUE = STANDARDIZED ENTERPRISE VALUE × INDUSTRIAL DEVIATION + INDUSTRIAL AVERAGE VALUE

NON-STANDARDIZE

STANDARDIZED ENTERPRISE VALUE 2.316 ⟹ 2.316×1303391+1217228 =4236036

STANDARDIZED ENTERPRISE VALUE = 0.34 × TECHNICAL INNOVATION ABILITY − 0.077 × RELATIONSHIP + 0.266 × PRODUCTIVITY OF EMPLOYEES − 0.154 USABILITY OF FACILITIES + 0.407 × EXPECTED FUTURE RETURN + 7.455E − 17 + 0.5 (0.5 IS ADDED FOR ADJUSTMENT)